PATENT ABSTRACTS OF JAPAN

(11) Publication number: 06042320 A

(43) Date of publication of application: 15.02.94

(51) Int. CI F01L 3/12

B23K 26/00

F01L 3/02

F01P 3/14

F02F 1/24

(21) Application number: 04198725

(22) Date of filing: 24.07.92

(71)Applicant: TOYOTA MOTOR CORP

(72)Inventor: OZAWA HITOSHI

TOKORO MASAMI SASAKI KAZUHIKO **KAWASAKI MINORU**

(54) VALVE SEAT FOR INTERNAL COMBUSTION ENGINE

(57) Abstract:

PURPOSE: To easily mold a circulating path for cooling liquid and a valve seat having a clad sheet layer and further to more improve cooling performance by the clad sheet layer.

CONSTITUTION: A valve seat 16 comprises a cooling groove 17, closing member 18 and a clad sheet layer 19. The cooling groove 17 is drilled in a contact location of an intake valve 6 in a cylinder head 1. The cooling groove 17 is formed in a circular annular shape and opened toward a combustion chamber 2. The cooling groove 17 communicates with а cooling water introducing hole and a cooling water discharge hole 26. The closing member 18 closes an opening end of the cooling groove 17. A circulating path 21 for cooling water is formed between the closing member 18 and a wall surface of the cooling groove 17. The

clad sheet layer 19 is formed by padding in surface of the closing member 18 and a peripheral location of the cooling groove 17 by a laser clad method where metal powder is welded by using irradiation of laser light.

COPYRIGHT: (C)1994,JPO&Japio

